

3.—*New Geometridae (Lepidoptera) in the South African Museum.*—

By LOUIS B. PROUT, F.E.S.*

SUB-FAM. HEMITHEINAE.

GEN. ALLOCHLORODES, gen. nov.

Face smooth. Palpus very short, 2nd joint shortly rough-scaled beneath. Tongue vestigial. Antenna in ♂ less than one-half forewing, bipectinate to near apex with rather short branches (in ♀ merely serrate?). Pectus somewhat hairy. Femora glabrous. Hindtibia in ♂ not dilated, with terminal spurs only. Abdomen not crested. Wings with sealing opaque, not glossy. Frenulum wanting.

Forewing with costa straight except close to base and apex, termen smooth, oblique, gently curved, tornus not very pronounced; cell about one-half, DC³ deeply incurved, SC¹ from cell, anastomosing with C. SC² shortly stalked with SC³⁻⁵, rather steep, anastomosing strongly with SC¹, R² from much before middle of DC, M¹ widely separate from R³.—*Hindwing* with costa long, apex rounded, termen smooth, moderately convex, straighter posteriorly, tornus moderate; cell one-half, DC³ incurved, becoming oblique, C anastomosing with SC to scarcely one-half cell, SC² stalked, R² from well before middle of DC, M¹ rather widely separate.

Type of the genus: *Allochlorodes elpis*, sp. nov.

May be placed between *Allochrotes* Prout and *Xenochlorodes* Warr., having nearly the subcostal venation of the latter, the separation of M¹ even wider than in the former, with which the palpus nearly agrees. The anastomosis of C of the hindwing is much less strong than in either, and the shape and facies more suggest the *Omphax* group.

1. ALLOCHLORODES ELPIS, sp. nov.

♂. 27 mm. Face, palpus and upper and inner sides of fore and middle legs rufous. Vertex and antennal shaft white. Occiput and thorax above green. Body and legs otherwise dirty white.

* The types are in the South African Museum.

Forewing green, apparently nearly as in *Xenochlorodes beryllaria* Mann (a little faded); a single white line, interrupted between the veins and apparently not reaching costal margin, at R¹ scarcely 2 mm. distant from termen, more oblique than termen and very gently curving, reaching hindmargin just over 3 mm. from tornus; dots on veins, very slightly darker than ground-colour, accompanying this line proximally.—*Hindwing* white, with faint tinge of green.—*Forewing* beneath paler green, posteriorly whitish, base of costa reddish; *hindwing* beneath as above.

Cape, Kalk Bay, April, 1904 (R. M. Lightfoot).

A very worn ♀, Clanwilliam, October, 1901 (Mrs. Marchant), seems also to belong here, rather smaller, slightly narrower, C of *hindwing* anastomosing still more shortly than in ♂.

SUB-FAM. STERRHINAE.

GEN. SCOPULA Schrank.*

2. SCOPULA FLEXIO, sp. nov.

♀. 23–25 mm. Face and palpus reddish brown. Vertex white. Collar ochreous brown. Thorax and abdomen dirty white; fore and middle legs more mixed with brownish.

Forewing not very broad, costa somewhat shouldered at base, apex pronounced, termen oblique, nearly straight, at tornus curved; white, in places (especially in median area) with coarse but rather sparse fuscous dusting; lines brown, irrorated with fuscous; antemedian fine, from before one-third costa, very acutely angulated outward in cell, then very oblique inward to one-fourth hindmargin, sometimes slightly sinuous; median thicker, from costa much beyond middle, slightly out-bent subcostally, then almost straight to hindmargin slightly beyond middle; postmedian from costa rather near apex, on the veins dentate outward and marked with fuscous dots, between R¹ and R³ incurved, behind M² more feebly incurved; a pure white line distally to this; subterminal line quite near termen, white, almost straight, bounded proximally and distally by a narrow brown-grey shade; terminal interneural dots strong, slightly elongate.—*Hindwing* with costal margin long, apex rounded; SC² and R¹ connate; white, with feeble indications of median and postmedian lines and

* *Acidalia* Tr., nom. praeocc.

double subterminal shade; terminal dots weaker than on forewing.—Both wings beneath (especially hindwing) feebly marked, forewing slightly suffused in proximal half; fringe of forewing more noticeably brown-tipped than above.

Cape, Duubrody, January, 1914 (Rev. A. Vogt), type; September, 1913, paratype in coll. L. B. Prout.

Will certainly belong to the sub-genus *Pylarge* H.-Sch. (♂ hindleg with terminal spurs). Distinguished from *picta* Warr. (Nov. Zool. iv, 62), and its ab. *fulvilinea* Warr.) (Ann. S. Afr. Mus. x, 483), which share with it the brown face, by the flexuous postmedian line. A good deal larger than ♀ *picta*.

3. *SCOPULA TENUISCRIPTA*, sp. nov.

♂. 25 mm. Face and palpus blackish. Vertex and antennal shaft white (antennae broken). Collar ochreous. Thorax and abdomen whitish, slightly irrorated with light brown. Legs ochreous to whitish, the forecoxa fuscous in front; hindtibia without spurs, but not dilated; hindtarsus very slightly longer than tibia.

Forewing with apex pointed, termen fairly straight, oblique, very slightly more so in posterior half than in anterior; creamy white, slightly more ochreous at costal edge, irroration light brown, very fine and sparse; lines brown, very fine; antemedian oblique, almost obsolete; median beyond the cell-spot, oblique outward at first, strongly bent about SC^5-R^1 , then oblique inward, almost obsolete; postmedian from nearly four-fifths costa, excurved at first, then nearly parallel with termen, slightly sinuate inward between the radials; discal dot small, black; terminal line very fine, brown, marked except in its posterior part with small black interneural dots; fringe somewhat irrorated and very feebly spotted.—*Hindwing* with termen angled at R^3 ; without antemedian line; median almost crossing cell-dot, but escaping it by a slight bend inwards at this point; postmedian faint anteriorly, slightly excurved, but not angled in middle, oblique outward from fold to abdominal margin; terminal black dots less sharp than in forewing.—Forewing beneath, except from hindmargin to fold, more ochreous, proximally with very slight smoky suffusions; first line wanting, cell-dot minute, terminal dots obsolete, the rest as above. Hindwing beneath slightly more ochreous-tinged than above, without median line, postmedian nearer termen, more crenulate, especially in middle part.

Transvaal, Barberton, June, 1912 (H. Edwards).

GEN. PTYCHOPODA Steph.

4. PTYCHOPODA LIPARA, sp. nov.

♀. 27 mm. Face and upperside of palpus black. Vertex and antenna whitish. Collar light brown. Thorax, abdomen, and legs concolorous with wings, forefemur and foretibia partly darkened. Abdomen robust.

Forewing rather broad, costa slightly arched, apex not acute; glossy, pale ochreous-grey, with slight fleshy tinge (less reddish than in *eugeniata* Mill., nearly as in deeply coloured examples of *sylvestraria* Hb. = *straminata* Tr.), the dark irroration red-brown, sparse and very fine; first line obsolete; discal mark sharp, slightly longer than broad; median shade slender, brownish, not strong, well distal to the cell-mark, incurved between M^1 and SM^2 ; postmedian line indicated by a slightly sinuous row of vein-dots, as in *eugeniata* Mill.; subterminal line very faintly indicated by a slight (almost inappreciable) darkening of the rest of the distal area; fringe with small but sharp proximal dots at vein-ends.—*Hindwing* with termen smooth, even; as forewing, with discal dot not elongate, median shade here vague, apparently bending closely round it on the proximal side. Forewing beneath similar, at hindmargin paler; hindwing more whitish, with discal dot slightly elongate, postmedian line of dots and those of fringe feeble.

Natal, Durban, January, 1903 (G. F. Leigh).

This may be rather near *oranaria* Bang-Haas (Iris, xx, 79, t. 3, p. 16), from S. Oran, which is only known to me from the description and figure, but the new species is rather larger, ampler-winged (forewing rather more rounded), less reddish in tone, more weakly dusted.

GEN. PALAEASPILATES Warr.

5. PALAEASPILATES MANSUETA, sp. nov.

♂. 34 mm. Differs from the only hitherto known species, *inoffensa* Warr. (Nov. Zool., i, 370), as follows: *Forewing* with costal margin straighter in middle, apex less pointed, termen not sinuous in anterior half; colour paler, light yellow-grey, the irroration very fine, postmedian row of dots developed throughout, almost parallel with termen (at 2 to 2.5 mm.), the dark line or shade which accompanies it in *inoffensa* almost entirely obsolete.—*Hindwing* with the feeble postmedian line (slightly better developed on the underside) also nearly

parallel with and much nearer to the termen (2 mm. distant at apex, 3 mm. in middle). The discal dots are larger than in most *inoffensa* and that of the hindwing rather better developed; but this character varies in *inoffensa*.

Cape, Bushmanland, 1896 (G. Alston).

SUB-FAM. LARENTIINAE.

GEN. ORTHOLITHA Hübn.

6. ORTHOLITHA PERINGUEYI, sp. nov.

♂ ♀. 32 mm. Head and thorax dirty white, mottled with brown and fuscous; palpus with little white except on the first joint. Antennal pectinations 3–4 times as long as diameter of shaft. Abdomen grey-brown, more variegated beneath than above.

Wings glossy.—*Forewing* white, the ground-colour almost entirely obscured by irroration and mottlings of fuscous and light brown, chiefly remaining as fine edgings to the basal and median areas, interrupted traces of other transverse lines and some spots and vein-streaks in median area; middle of costa sometimes noticeably pale; a narrow brown band about 2 mm. from base, strongly excurved; the white lines which bound the median area double, their remoter elements more interrupted; median area with a narrow brown band at each side, the proximal from about one-third costa to beyond one-third hindmargin, forming an outward angle in the middle and here marked with blackish on the bifurcation of M and M², the distal from beyond two-thirds costa to about two-thirds hindmargin, forming a small outward curve near costa and a rather strong lobe at R³, then retracted to M², thence perpendicular or slightly oblique outward to hindmargin; subterminal line formed of white interneural dots; a very short oblique dark mark from apex; termen with pairs of elongate black dots, sometimes more or less connected by a fine interrupted line; fringe chequered.—*Hindwing* light brown-grey, with a pale double postmedian line, which is angled outward behind R³, incurved posteriorly and directed towards tornus at hindmargin; traces of interrupted whitish subterminal line, clearer and whiter at tornus; fringe weakly chequered.—*Forewing* beneath brown-grey, with small dark discal dot and pale double postmedian line; between this and the subterminal rather browner; subterminal and terminal lines and fringe nearly as above. *Hindwing* beneath sharply marked; whitish with fuscous irroration, small dark discal dot, darkened veins distally

hereto, forming conspicuous dark dots on a fine line which precedes the white double postmedian band; distal area corresponding to that of forewing, but with the band proximally to the subterminal dots stronger.

Cape, Hout Bay, near Cape Town, May, 1901 (W. L. Slater). Type in coll. S. Afr. Museum, others from the same source in coll. Brit. Mus. et coll. L. B. Prout.

The mottled appearance, dotted subterminal line and well-marked hindwing distinguish this species at a glance.

7. *ORTHOLITHA PUNCTISCRIPTA*, sp. nov.

♂. 30 mm. Face somewhat rough-scaled, but without projecting cone; ochreous, narrowly marked with fuscous above and rather more broadly below. Palpus little longer than diameter of eye, first and second joints rough-scaled, third minute, concealed; fuscous. Antenna pubescent, beneath strongly lamellate, with close teeth at least as long as diameter of shaft. Vertex, thorax, and abdomen concolorous with wings. Foreleg darkened on upper- and innerside (middle and hindlegs lost).

Forewing not very broad, termen smooth, slightly curved, strongly oblique; whitish grey, in places slightly shaded with ochreous, and with minute and sparse (proximally, especially along the costa, rather denser) fuscous irroration; sub-basal line fuscous, bent in cell, then oblique inward; antemedian and postmedian very fine and slight, but accentuated by strong dots on the veins; antemedian from nearly one-third costa to beyond one-third hindmargin, very slightly excurved; postmedian from about two-thirds costa, vertical at first, slightly incurved between the radials, oblique inward from M^1 to M^2 , then slightly sinuous to hindmargin; 3 or 4 still fainter wavy lines in median area, strongest at costa, and some faint dark shading near termen, especially in anterior half; lines between sub-basal and antemedian and between postmedian and distal dark shading represented by pairs of conspicuous vein-dots; discal dot minute; terminal line inclining to form pairs of dark dots or dashes at each vein.—*Hindwing* rather narrow, apex round-prominent, termen smooth, slightly sinuous, the convexity coming about the middle; slightly paler than forewing, the markings analogous but rather weaker, the dots of the postmedian line and of the first of the pair beyond it the most conspicuous, leaving rather noticeable the narrow pale intervening band.—Underside similarly but more weakly and confusedly marked.

Type, without locality label, in coll. S. Afr. Mus.

The coloration and dotted markings recall some Palaearctic Larentiids, notably *Calostigia multistrigaria* Haw. or sharply-marked *Euphyia intersecta* Stgr.

GEN. LARENTIA Tr.

8. LARENTIA DIPLOCAMPA, sp. nov.

♀. 31 mm. Face without projecting cone; fuscous with some pale admixture. Palpus shortish; as face, the first joint entirely pale beneath. Vertex, thorax and abdomen concolorous with wings.

Forewing with termen only very faintly waved; DC biangulate, though not as strongly as in hindwing, R¹ stalked, R² from slightly behind middle of DC; wood-brown, shaded with cinnamon and with irregular, coarse, fuscous irroration; costal edge somewhat dotted with fuscous; lines dark fuscous, rather fine, not well defined; antemedian at somewhat beyond one-third, apparently angled outward at cell-fold, then sharply oblique inward, vertical and somewhat thickened across M, again oblique inward for a short distance behind, then nearly vertical (a little sinuous) to hind margin; somewhat thickened on crossing SM²; sinuous lines and irroration proximally to this line prevent its being well differentiated; a fairly distinct line in median area, about 1.5 mm. from the antemedian, approximately parallel with it in anterior part, curved *outward* at submedian fold; succeeded distally by a narrow pale median space; postmedian line at rather beyond two-thirds, markedly lunulate-dentate, bilobed between R³ and M², slightly inbent at R², inbent at M²; 2 or 3 feebler lines in median area proximally to this, nearly parallel with it but less bilobed; pale band beyond postmedian not conspicuous; proximal boundary-line of terminal area almost parallel with postmedian: some weaker crenulate lines between this and termen; a short oblique mark at termen close to apex; terminal dark line somewhat interrupted at veins and folds (fringe wanting).—*Hindwing* prominent at end of SC²; termen waved; paler than forewing: a dark discal dot, rather weak postmedian line (excurved about R²-M², slightly incurved posteriorly) and still weaker traces of one or two other lines.—Forewing beneath greyish, proximal part unmarked, postmedian lines present, feeble posteriorly; a slight brownish subterminal band in anterior half, pale-edged distally, especially between SC⁵ and R¹. Hindwing beneath more strongly marked than above.

Cape, Cape Town, April, 1913 (P. C. Keytel).

Size, shape and colouring (though this is rather less bright) recall *Ortholitha ferridotata* Walk., but the discocellulars are different, the lines differently formed, white lines wanting, underside less brown.

GEN. EUPITHECIA Curt.

9. EUPITHECIA REDIVIVA, sp. nov.

♂. 17–18 mm. Palpus $1\frac{3}{4}$ times diameter of eye, rather heavily scaled, third joint small, deflexed. Antennal ciliation minute (one-fourth diameter of shaft). Head and body concolorous with wings; crown of head paler; abdomen with dorsal ridge and crests pale.

Forewing pale cinereous, faintly tinged with liver-colour; about nine very fine transverse wavy or denticulate lines, parallel with termen, mostly indistinct and more or less interrupted; the four proximal usually very indistinct, in part obsolescent, the four distal slightly better expressed; median area somewhat clearer, its single line weak, less denticulate than the others, passing distally to a distinct black discal spot; costal area slightly dark-shaded; terminal line very faint.—*Hindwing* rather paler, with one or two very weak denticulate lines parallel to, and near, termen and the beginnings of three or more equally weak (or weaker) ones on abdominal margin; discal dot small and inconspicuous.—Underside of forewing more grey-suffused in costal half; of hindwing more dark-speckled, especially basally and costally; of both wings with distinct discal dot and two rather thick and diffuse, but weak lines between this and termen, parallel with the latter.

Transvaal, Pilgrim's Rest (Miss L. Schunke). Others from Haenertsburg, December 5th–9th, 1909 (C. J. Swierstra), in coll. L. B. Prout et coll. Transvaal Mus. and Watervalonder, November, 1910, in coll. A. J. T. Janse et coll. L. B. Prout. Mentioned and figured in Ann. Trsv. Mus. iii, 208, t. 12, f. 33, as provisionally a form of *atomaria* Warr.; rather narrower, more brownish grey, more weakly marked, terminal line more slender, more interrupted, the other lines finer, less broken, that succeeding the outer "rivulet" band of both wings not (as in *atomaria*) appreciably recurved towards tornus, discal dot of hindwing more distinct, palpus with third joint rather less elongate, more deflexed.

10. EUPITHECIA SUBCONCLUSARIA, sp. nov.

♂ ♀. 20–22 mm. Similar to the smaller specimens of *inconclusaria* Walk. (List. Lep. Ins. xxiv, 1242), but with the following differences: Antenna of ♂ more thickened, with the ciliation much less than one-half the diameter of the shaft (in *inconclusaria* almost as long as diameter of shaft). Second abdominal tergite more strongly darkened. Body and wings in general paler, the hindwing almost white. Wings rather less extremely elongate, apex of forewing rounded.

Forewing with median area narrower, the angulated postmedian line closely succeeding the discal dot, which is sometimes extended along the curved cross-vein and forms with the thickened bend of the postmedian a rude ocellus; dark markings of distal area weakened, especially the subapical costal patch.—*Hindwing* with a conspicuous discal dot.—Both wings beneath without dark subterminal band.

Cape, Kalk Bay, February, 1904, and April, 1891 (R. M. Lightfoot). Both sexes in coll. S. Afr. Mus. et coll. L. B. Prout, the type dated February, 1904, and all the other examples worn.

11. EUPITHECIA LICITA, sp. nov.

♂ ♀. 19–22 mm. Also rather similar to *inconclusaria* or to the preceding, but rather broader-winged and somewhat more glossy. ♂ antenna nearly as in the preceding, the ciliation even more vestigial. Abdominal crests very minute.

Forewing with apex rounded as in *subconclusaria*, termen less extremely oblique; variable in tone (greyer, browner or tinged with sand-colour); markings also rather variable, never very strong; the lines of proximal area usually starting from noticeable costal strigulae and marked by dots on the veins; median area sometimes as narrow as in *subconclusaria*, but then with the black cell-dot placed nearer to its proximal border; its borders generally rather less oblique, the antemedian rather better defined, more regularly curved, rather thick, often slightly strengthened on the veins; postmedian less acutely bent, the dark markings on the radials generally less conspicuous, sometimes almost obsolete; cell-dot often set in a whitish ring.—*Hindwing* longer than in *subconclusaria*, broader than in *inconclusaria*, thus not presenting quite the normal *Eupithecia* aspect; as white as in *subconclusaria*; cell-dot wanting above, present beneath.

Cape, Clanwilliam, November, 1899 (R. M. Lightfoot), 5, including the type; Montague, November, 1902 (W. F. Purcell), 2 ♀ ♀.

12. EUPITHECIA SUBCANIPARS, sp. nov.

♂. 22 mm. Face scarcely tufted. Palpus moderately stout, over $1\frac{1}{2}$ times as long as diameter of eye. Head and thorax concolorous with forewing, the palpus more fuscous; abdomen more rufous than hindwing.

Forewing with costa very slightly arched, from before middle to near apex straighter, apex round-pointed, termen slightly curved, strongly oblique; pale grey, closely irrorated with rufous, leaving an ill-defined grey area along cell and beyond it to postmedian line and

behind it proximally (obliquely bounded about from one-third hind-margin to origin of M^2); on the grey area are placed some fuscous dots which tend to form (or suggest) oblique lines; cell-dot sharp, little elongate; postmedian line vague, accentuated on the veins from R^3 to M^2 , oblique outward from beyond three-fifths costa, angled at R^1 , then about parallel with termen; the usual bisected pale band distally to the postmedian weak, especially at costal end; subterminal line hoary, not very sharp, strongly dentate anteriorly, then nearly straight to submedian fold (with minute teeth outwards on the folds), finally oblique to tornus; terminal line feeble, interrupted at the veins; fringe with a fine pale line at base and again slightly pale beyond middle.—*Hindwing* with costa rather straight, apex round, prominent, termen very slightly waved, not very strongly convex; pale grey, tinged with rufous; cell-dot small but sharp; distally hereto very faint alternations of paler and darker shadings suggest thick lines or slender bands; the abdominal margin darkened; terminal line and fringe as on forewing.—Forewing beneath less variegated, the costal margin rather more noticeably spotted. Hindwing beneath rather better marked than above, curved dark postmedian and sub-terminal lines being rather more clearly expressed.

Transvaal, Pilgrim's Rest (Miss L. Schunke).

The colours of the forewing are nearly as in variegated forms of *pimpinellata* Hb., but their distribution very different, more suggesting the arrangement of *sophia* Butl. or *sinicaria* Leech; *celatisigna* Warr. (*perculsaria* Swinh.) has much in common with the new species, but is smaller, darker, less hoary proximally, the discal dots less developed.

13. EUPITHECIA SUBTERLIMBATA, sp. nov.

♂ ♀. 21–24 mm. Head and upperside of body green, dotted and spotted with brown or fuscous; underside and anal extremity pale ochreous grey, abdomen in dark specimens a good deal irrorated with fuscous. Palpus nearly twice as long as diameter of eye; pale greyish ochreous, much mixed with fuscous. Antenna in ♂ with slender sessile fascicles of cilia, fully as long as diameter of shaft. Abdominal crest developed, pale grey, mixed with fuscous. Foreleg above and on inside strongly darkened, except at ends of joints.

Forewing moderately broad; pale dull green, variably (but always more or less strongly) irrorated with fuscous or reddish-brown, or even light, bright ferruginous; markings fuscous; basal patch slight or obsolete; subbasal band little bent, lines between this and median area vague; median area rather broad, variable, always more or less

markedly red-brown or fuscous, often with darker clouding in middle of posterior half; antemedian line sinuous, at posterior end oblique outward, sometimes strongly darkened and thickened from cell-fold to hindmargin; cell-dot small; postmedian line sinuous, rather oblique outward to R^3 , here lobed, posteriorly incurved; the narrow green band beyond vaguely bisected except between radials, where its proximal half is almost white: distal area with ill-defined dark lines and spots, and traces of an interrupted lunulate pale subterminal, proximal to which a pair of dots between the radials (oftenest confluent) and a spot between M^2 and SM^2 are more or less noticeable; termen with pairs of not very conspicuous dark dots; fringe pale greyish-ochreous, dark chequered.—*Hindwing* pale ochreous grey, suffused, except on the narrow postmedian band, with darker grey, a border of about 2 mm. width darkest; cell-dot small; terminal dots and chequering of fringe weak.—Both wings beneath pale ochreous grey, weakly marked except at distal margin, which bears a conspicuous dark border of about 2 mm. width, that of forewing constricted in the middle and sometimes almost interrupted, at least with a pale terminal spot behind R^3 ; cell-dots often fairly sharp.

Natal, Durban, Umbilo and Victoria District, in coll. S. Afr. Mus., coll. L. B. Prout, coll. A. J. J. Janse, etc.; type ♂, Durban, in coll. S. Afr. Mus.

This species has long been known to me, but although some specimens are marked "bred," none are in perfect condition. It is, however, so easily recognised that, now that I have a series before me, I do not hesitate to publish it. It resembles some forms of the variable *Coenotephria prasinaria* Warr. (Nov. Zool. viii, 13; x, 273), except in the structure. Probably near the species which I determine as *cidariata* Guen. (Spéc. Gén. Léop. x, 357, t. xi, f. 9), but distinguished by the dark borders beneath and by the antenna, which in that species bears pairs of short, fasciculate pectinations.

GEN. CHLOROCLYSTIS Hb.

14. CHLOROCLYSTIS (GNAMPTOMIA) MUSCOSA TUMEFACATA, subsp. nov.

♂ ♀. 17–20 mm. Smaller than *muscosa muscosa* Warr. (Nov. Zool., ix, 508), from British East Africa, forewing with the costal swelling and hair-tuft proximally to the "nibbled out" portion {stronger; coloration duller; antemedian line not so crooked; hindwing {more sharply marked, much like that of *marmorata* Warr. (Nov. Zool., vi, 38).

Natal, Victoria district (W. D. Gooch), type in coll. S. Afr. Mus. Also from Durban in various collections.

GEN. CONCHYLIA Guen.

15. CONCHYLIA LAMELLATA, sp. nov.

♂. 30 mm. Head and body white, somewhat mixed with brown. Palpus more brown, quite short, not extending as far as frons. Antenna thick, merely lamellate, with minute ciliation.

Forewing very glossy white, with slender brown markings; costal streak thread-like at base, gradually widening from before middle of wing, in distal part bounded by front of areole and SC⁴; a slender longitudinal stripe from base, bounded anteriorly by cell-fold, becoming still slenderer distally, where it joins the outer stripe in front of R²; outer stripe thread-like at apex, then broadening slightly, straight and oblique to M² at 2 mm. from termen, here obtusely bent, thence very faintly sinuous, very gradually approaching hindmargin, finally running along behind SM² and not quite reaching base; a brown terminal line; fringe proximally brown, distally white.—*Hindwing* white.—*Forewing* beneath smoky, the markings obsolescent. *Hindwing* beneath as above, the costal edge slightly smoky.

Cape, Port Elizabeth, 1900 (O. West).

Very similar to *nitidula* as figured in Cramer (Pap. Exot. iv, 240, t. 399 N),* but distinguished by the ♂ antenna, etc. Should be referred to the sub-genus *Callythria* Weym. (type *alternata* Warr., Nov. Zool. viii, 209; *argenteofusciata* Weym., Deutsch. Ent. Zeit. 1908, p. 512), but probably *Conchylia* will have to sink to *Lithostege* Hb., in which case the non-pectinate section will stand as name-typical, with *Callythria* as synonym, the pectinate as sub-genus *Conchylia* Guen. The glossy scaling and distinctive pattern are scarcely generic, especially as *Conchylia irene* Prout (Nov. Zool. xxii, 336) and *Lithostege decorata* Warr. (Ann. S. Afr. Mus. x, 23) and *sesquifascia* Prout (Ann. Trsv. Mus. iii, 262) in some respects furnish intergrades.

16. CONCHYLIA ACTENA, sp. nov.

♂. 29 mm. Face and palpus light brown. Crown white. Antenna apparently nearly as in the preceding (somewhat damaged with

* I have seen no example agreeing with this figure in having the outer stripe obsolete at apex, but provisionally (following Warren in Tring Mus.) refer to *nitidula* an otherwise similar species, with shortly pectinate ♂ antenna, which occurs in Cape Colony and Natal; in any case the figure clearly shows the pectinate antennae.

mould, in any case not pectinate). Thorax light brown, mixed with white. Legs (especially the foreleg) partly infuscated. Abdomen light brown-grey.

Forewing white, glossy, but not so intensely as in the *nitidula* group; no markings except two slender (scarcely over .5 mm.) brown bars, both slightly roughened at their edges, or at least tending to be feebly dentate outward on the veins; first from SM^2 at 3.5 mm. from base, very oblique to cell-fold near end of cell, then slender along the fold to the cross-vein, where it forms a small, irregular spot; second from SM^2 at tornus, very slightly curved in the opposite direction to termen, ending in a point at SC^4 close to apex; fringe concolorous.—*Hindwing* light brown-grey, unmarked; fringe white.—*Forewing* beneath smoky, the lines traceable; fringe white. *Hindwing* beneath as above, or very slightly paler.

Cape, Fraserburg, April 1885 (E. G. Alston).

Superficially very near *irene* Prout, which has the antenna pectinate with branches about two-and-a-half times diameter of shaft.

SUB-FAM. GEOMETRINAE.

GEN. MICROLIGIA Warr.

17. MICROLIGIA INTERVENATA, sp. nov.

♂. 30 mm. Structure about as in *dolosa* Warr. (Nov. Zool. iv, 124), face perhaps less strongly tufted (but somewhat abraded), wings slightly longer and narrower. Face brown, white below. Palpus mixed brown and white, the white predominating below. Vertex white. Thorax and abdomen white, mixed with brown.

Forewing glossy white, with light brown markings, consisting of more or less broad, chiefly interneural, longitudinal streaks; first streak subcostal, almost reaching the costal margin from the end of C to SC^3 , where it terminates; second streak commencing beyond middle of cell, becoming trifold distally, the first branch running between R^2 and R^3 , the second between R^1 and R^2 , the third obliquely forward to termen near apex; two shorter streaks between R^3 and M^2 , reaching termen; a long one behind M and M^2 from base to termen, tapering posteriorly, another branching from this at base and running behind the fold and another close to hindmargin (behind SM^2).—*Hindwing* pure white.—*Forewing* beneath pale brownish, the white parts of upper side weakly indicated. *Hindwing* beneath white.

Orange Free State, Smithfield, 1910 (Kannemeyer).

A pretty species, superficially recalling *Pseudomaenas alcidata* Feld. The genus *Microligia* seems only to differ from *Argyrophora* Guen. (type *trofonia* Cram.) in that R^3 and M^1 of the hindwing are not stalked, and is perhaps scarcely tenable.

GEN. PSEUDOMAENAS, nom. nov.

Agrammodes Warr., Ann. S. Afr. Mus. x, 27 (1911), nec Uhler (1895).

18. PSEUDOMAENAS ONCODOGRAMMA, sp. nov.

♀. 35 mm. Head and body concolorous with wings; palpus more brown. Antenna minutely ciliated.

Forewing shaped and coloured about as in *anguinata* Feld. (Reise Novara, Lep. Het. t. 129, f. 1), light violet-grey, costally slightly more brownish; sparse black sprinkling; markings black, narrowly and inconspicuously edged with light brown; a large triangle arising at hindmargin close to base, its anterior side over 4 mm. long, the apex entering the cell, its posterior side 5 mm., just crossing SM^2 , its distal side 3 mm.; a large, somewhat comma-shaped mark in the cell, its broad, distal end crossing the discocellulars; a postmedian band not reaching costa, its proximal edge shaped nearly as in *anguinata* but more oblique posteriorly, its distal edge strongly sinuous, angled inwards on M^2 , so that the band gradually widens in the middle and is constricted at the angle; a very fine whitish line distally to this band, as in *anguinata*; an oblique dash close to apex; terminal line not or scarcely interrupted.—*Hindwing* almost unmarked, a very faint sinuous postmedian line discernible in some lights.—Underside almost unmarked.

Transvaal, Pilgrim's Rest (Miss L. Schunke).

An interesting link between *anguinata* Feld. and *intricata* Walk. (List Lep. Ins. xii, 814 = *maculipennis* Wllgren., Svensk. Akad. Handl. v (4) 72 = *callistege* Feld. t. 132, p. 29), though nearer to the former.

GEN. HEBDOMOPHRUDA Warr.

19. HEBDOMOPHRUDA CRENILINEA, sp. nov.

♀. 34 mm. Closely similar to *apicata* Warr. (Nov. Zool. iv, 101), from Natal and Cape Colony, of which species it may even conceivably be a local modification. Middle segments of abdomen strongly infuscated dorsally.

Forewing slightly less pale, only differing essentially in that the oblique black line and its accompanying shades are markedly waved or crenulate throughout instead of straight; in addition, some extremely fine black lines, faintly discernible in *apicata*, are more noticeable, one curving backward and inward from the cell-dot, another running out from this to a very acute angle on R^1 , touching the anterior brown shade, then running obliquely inward and sinuous, parallel with the stronger black line and again touching the anterior brown shade on M^1 and on M^2 ; the curved white line distally and posteriorly to the oblique line and shades (often fairly conspicuous in *apicata*, though not noticed in Warren's description) is purer and rather broader, hence very conspicuous.—*Hindwing* also less pale and with the faint lines sinuous.

Orange Free State, Smithfield (Kannemeyer), type in coll. S. Afr. Mus.; Maseru, Basutoland, April 11th, 1902 (R. Crawshay), a larger (37 mm.), duller ♀ in coll. Brit. Mus.; a worn ♂ without locality, nearer to the latter in size and apparently in coloration, in coll. L. B. Prout.

The ♀ antenna is shortly bipectinate.

20. *HEBDOMOPHRUDA ERRANS*, sp. nov.

♂. 24–29 mm. Also near to *apicata* and especially (in the crenulate postmedian line) to *crenilinea*. Antenna of ♂ with the pectinations somewhat shorter (scarcely over twice diameter of shaft, against thrice in *apicata*) and stouter. Abdominal dark shading more posteriorly placed.

Forewing with termen more waved, cell slightly longer still, M^1 arising close to R^3 (in *crenilinea* rather widely separate); antemedian line expressed, in places thickened (especially at costa), oblique outward from one-fourth costa or rather beyond, biangulate in cell and on M (**W**-shaped), then very oblique inward to one-fifth hindmargin; cell-mark vague, elongate; postmedian line rather more proximally placed, crossing M^1 near the cell (in *crenilinea* midway between cell and termen), throwing out small dashes proximally on the veins; the dark shades proximally to this line fairly strong, at least in posterior part of wing, but ill-defined, no dark line or shade distally; an oblique dark cloud on hindmargin midway between postmedian line and tornus or rather nearer the latter.—*Hindwing* with termen rather strongly and irregularly crenulate, a rather conspicuous tooth at end of R^3 ; postmedian line sharply defined from abdominal margin about to R^3 , scarcely crenulate, obsolete anteriorly; at abdominal margin

the beginning of another line proximally hereto.—Forewing beneath with costal margin rather more strongly spotted.

Cape, Fraserburg, April, 1885 (E. G. Alston), type in coll. S. Afr. Mus; Bushmanland, 1897 (Schlechter), paratype (rather pale and more yellowish-brown, crippled in one hindwing) in coll. L. B. Prout.

GEN. DREPANOGENIS Guen.

21. DREPANOGENIS PERO, sp. nov.

♀. 33 mm. Head and palpus red-brown, mixed with black; 3rd joint of palpus distinct. Antennae lost, the few joints which remain not pectinated. Thorax pale fleshy ochreous, above strongly mixed with red-brown; abdomen pale, strongly dotted with black.

Forewing not very broad, termen rather irregularly and weakly subrenulate, very slightly excised between apex and R^1 ; SC^2 anastomosing at a point with SC^{3+4} ; very pale fleshy ochreous (whitest in cell and just beyond postmedian line), irrorated with red-brown and sparsely with black; veins more ochreous; lines black, throwing out short vein-dashes into the median area; first from two-sevenths costa to little beyond one-fourth hindmargin, very deeply excurved; postmedian parallel with termen, at 3.5 mm. distance, minutely lunulate-dentate; median area for the most part more shaded with red-brown, leaving a conspicuous pale patch bounded anteriorly by $M-R^3$, posteriorly by M^2 and distally by the postmedian line; subterminal line fine, somewhat interrupted, whitish, deeply lunulate-dentate, accompanied proximally by dark spots or wedges between the veins; termen with black vein-dots; fringe with dark intersecting line (damaged).—*Hindwing* rather paler; a dark postmedian line present, strongest at abdominal margin, bent at R^1 but fading out anteriorly; weak dark subterminal shading.—Both wings beneath pale fleshy-ochreous, with scattered dark irroration, minute discal dot and fine postmedian line, that of the hindwing reaching costa; forewing in addition with very slight suffusions in median area.

Cape, Clanwilliam, November, 1899 (Lightfoot).

The absence of the ♂ leaves the affinities somewhat doubtful. The coloration recalls the South American genus *Pero*—notably *variaria* Walk.

22. DREPANOGENIS LEPTODOMA, sp. nov.

♂. 32 mm. Head, palpus, breast and upperside of foreleg reddish. Collar brown. Thorax above pale grey, strongly irrorated with red-brown; abdomen pale.

Forewing shaped nearly as in *admiranda* Warr. (Nov. Zool. xii, 406), the distal margin posteriorly slightly more oblique; colouring as in *admiranda*, rather more glossy, with more distinct (though fine and sparse) greyish transverse strigulae, the ochreous costal edge narrower and less bright, the fringe not ferruginous in proximal half; first line from little beyond one-fourth costa, gently curved (not angled) between costa and SM², even slightly oblique *outward* from SM² to hindmargin; cell-spot as in *admiranda*; postmedian line from costa 2 mm. before apex, parallel with termen at first, then very gently incurved, reaching hindmargin at scarcely more than 2 mm. from tornus; distal area slightly more whitish; terminal line fine.—*Hindwing* with apex and termen slightly more rounded than in *admiranda*; more whitish than forewing, without dark irroration or strigulation; a small cell-dot; the beginning of a fine postmedian line 1.5 or 2 mm. from tornus, curving away from termen but soon becoming very faint or obsolete; a fine terminal line.—Forewing beneath more reddish, especially anteriorly, the costal margin ochreous, with dark reddish strigulation; antemedian line obsolete, cell-dot and postmedian feeble. *Hindwing* beneath irrorated with ochreous and in places with reddish; cell-dot feeble; a scarcely discernible, slightly sinuate postmedian line, nearer to cell-dot than to termen.

Transvaal, Pilgrim's Rest (Miss L. Schunke).

Probably nearest to *devia* Prout (Ann. Trsv. Mus. x, 210), but paler, more slenderly built, more glossy. Antennal pectinations moderate, about as in the allies.

GEN. ASPILATOPSIS Warr.

23. ASPILATOPSIS ORTHOBATES, sp. nov.

♀. 36 mm. Structure (unless of the antennae, which are lost) as in *antennaria* Guen. Both wings (especially the hindwing) somewhat narrower. Head and body pale grey-brownish with a slight tinge of buff; abdomen darker beneath.

Forewing whitish grey, with dark olive-grey, largely confluent strigulation and very sparse fuscous irroration; inner marginal area from base to postmedian line suffused with light brown; the two dark lines distinct, edged with whitish on their reverse sides; antemedian from nearly one-third costa, strongly oblique outward, acutely angled in middle of cell, then oblique inward and straight to well before one-third hindmargin; postmedian straight, oblique, from costa close to apex to well before two-thirds hindmargin; a small black discal dot.—*Hindwing* slightly paler, darkening a little at distal margin, especially

in apical region; no appreciable markings.—*Forewing* beneath somewhat more smoky than above, cell-dot and postmedian line present but not very sharp, the latter placed as above from hindmargin to R^3 , then running parallel with termen to costa 3.5 mm. from apex (further from apex than in *antennaria*).—*Hindwing* beneath more strongly irrorated than above (except at abdominal margin), with a cell-dot and a curved postmedian line, approximately parallel with termen, nearer to cell-spot than to termen, evanescent at abdominal margin.

Transvaal, Pilgrim's Rest (Miss L. Schunke).

On account of the shape, the straight lines, etc., I do not think this can be a form of the variable *antennaria* Guen.; an extremely worn ♂ with the same data had, however, apparently the fulvous tone of the latter, so that colour cannot be added to the points of differentiation.

GEN. SICYODES Warr.

24. SICYODES PULVEREA, sp. nov.

♀. 30 mm. Head and body concolorous with wings; palpus, crown and front of thorax more heavily irrorated. Antenna merely serrate, not pectinate.

Forewing with apex blunter than in typical *Sicyodes*, termen less oblique, not noticeably subcrenulate nor gibbous; stalk of SC^{1-2} connected with C, SC^2 anastomosing with SC^{3+4} ; vinaceous buff, with base of costa darkened and with scattered blackish dusting; no appreciable markings except an exceedingly faint discal dot and a postmedian line from about two-thirds costa faintly indicated in some lights, slightly angled outward near costa, then about parallel with termen; distally hereto a very narrow pale interval (merely indicated by the absence of irroration), beyond which the terminal area appears, in some lights, a little darker than the rest of the wing; termen with dark interneural dots not very sharp, becoming still feebler posteriorly; fringe concolorous.—*Hindwing* similar, with the postmedian markings apparently rather further from termen, but scarcely discernible.—Underside similarly coloured, virtually without markings.

Cape, Kalk Bay, February, 1904 (R. M. Lightfoot).

A rather anomalous and very inconspicuous species, the shape and aspect more suggesting a *Petelia* than a *Sicyodes*, the venation not quite typical.

25. SICYODES SUBOCHREA, sp. nov.

♀. 28 mm. Structure in most respects as in the preceding, antennal serration rudimentary, C of forewing free, SC^2-R^1 of hindwing stalked.

Head and thorax concolorous with forewing, slightly more mixed with ochreous on collar and front of thorax; abdomen more strongly mixed with ochreous.

Forewing fawn colour, with vague olive-grey irroration; lines very indistinct, merely suggested by confluence of the irroration; ante-median at one-third, slightly angled outward on M (at origin of M²), accompanied proximally at SC and M by very inconspicuous pale spots; a median shade discernible on middle of hindmargin; cell-mark darker, extending the full length of DC²⁻³ and about half as broad as long; postmedian line slightly nearer to termen than to cell-spot, rather more excurved in middle than termen, accompanied distally by slight indications of a row of pale spots, the most conspicuous at costa.—*Hindwing* much more ochreous, with the beginning of a rather thick darker line at abdominal margin 2 mm. from tornus. Both wings beneath glossy ochreous, the hindwing unmarked, the forewing more tinged with flesh-colour and with the costal edge minutely dark-strigulated and the cell-mark of upperside feebly reproduced.

Orange Free State, Smithfield (Kannemeyer).

A damaged ♀ (palpi broken, antennae lost, one forewing much torn) from Annshaw (Miss F. Barrett), in coll. Brit. Mus., apparently belongs to the same species, and shows that it is somewhat variable, not always so markingless. In this the forewing is more irrorated with light brown, especially from the middle to the post-median line, forming here a kind of vague band; the costal margin shows dark dots indicating the position of the lines; the postmedian line is rather better expressed, somewhat angled inward close to costa and outward about R¹, and is followed distally by some ill-defined spots between R² and M², which also show on underside; the hindwing shows traces, from abdominal margin to R¹, of curved postmedian line or shade.

GEN. AXIODES Warr.

26. AXIODES DOCHMOLEUCA, sp. nov.

♂ ♀. 25–30 mm. Head and body concolorous with wings. Antennal pectinations in ♂ moderate, just over 3 times the diameter of the stout shaft; in ♀ scarcely (the inner series not) longer than diameter of shaft.

Forewing with costal concavity well marked, apex not extremely sharp, termen only quite moderately crenulate; SC³ in ♀ present, though sometimes only separating from SC⁴ quite close to apex; very light violet-grey, slightly suffused with light brown and with a few

scattered blackish scales; veins ochreous brown; a blackish streak from base along fold (not reaching antemedian line), throwing out a slighter streak along SM^2 ; antemedian line blackish, from one-fourth or two-sevenths costa, very oblique outward to M at origin of M^2 (but indented or accompanied by a proximal dash behind SC), from M very oblique inward and slightly sinuous to before SM^2 , very oblique inward to hindmargin; postmedian very slightly crenulate, from R^1 about 2.5 mm. from termen, slightly incurved about M^2 to fold, bluntly or moderately toothed outward between fold and SM^2 ; a fine whitish line accompanying the postmedian distally; a broad (over 1 mm.) oblique white or whitish streak from apex to end of cell, underlined (at least in its distal part) with blackish; subterminal line pale, very ill-defined distally, where the ground-colour is paler than proximally; an irregular blackish patch between it and the posterior sinus of postmedian line; termen with blackish lunules; fringe dark-mottled.—*Hindwing* with termen weakly crenulate, rather more strongly about SC^2 and R^1 ; grey-brown, slightly darker distally than proximally; a vague pale postmedian line, curving a little towards tornus posteriorly.—Both wings beneath pale grey-brown or brown-grey, with traces of paler postmedian line; forewing with costal edge somewhat dotted with fuscous; hindwing with a distinct discal dot.

Cape, Kenilworth, May, 1901 (W. L. Sclafer).

I have described as typical the form which prevails at Cape Town, and which I have also seen from Basutoland, Johannesburg, etc.; but the species seems to be very variable in the expression of the markings, the dark mottlings, etc. When, as in the name-type, the white apical streak entirely obliterates the postmedian line it is very sharply characterised, but often (Annshaw and sometimes Deelfontein) this streak is less sharply white and the line continues across it. Always, however, it is very easily distinguishable from the allied *inangulata* Warr. (Nov. Zool. xii, 408) by the very much less angulated postmedian line.

GEN. APHILOPOTA WARR.

27. APHILOPOTA PHANEROSTIGMA, sp. nov.

♂ ♀. 42–44 mm. Form and aspect of *interpellans* Butl. (Ann. Mag. Nat. Hist. (4), xvi, 417), of which it may possibly even prove a local race. Head and body concolorous with wings.

Forewing drab, with a tinge of fawn-colour and with scattered dark

irroration; cell-dot large, black, long-oval; lines scarcely indicated except by blackish dots on the veins; antemedian from one-fourth costa to beyond one-fourth hindmargin, somewhat excurved anteriorly; postmedian from before three-fourths costa, curving inward so as nearly to touch the cell-mark on R^3 , then nearly vertical to hindmargin.—*Hindwing* similar, sometimes slightly paler; first line wanting; postmedian slightly curved, but generally placed near the cell-mark.—Underside paler, with very feeble dark irroration; cell-dots present; postmedian dots present, but generally indistinct.

Salisbury, 1915 (Dr. M. Melle), type in coll. S. Afr. Mus.; also in coll. Brit. Mus. from the same district.

GEN. HEMEROPHILA Steph.

28. HEMEROPHILA ABSURDA, sp. nov.

♂. 32-35 mm. Face with appressed scales; fuscous. Palpus short; fuscous. Tongue slight. Antenna bipectinate apparently to apex (extreme tip lost), with long, rather slender branches. Vertex, thorax and abdomen concolorous with wings. Hind tibia not dilated.

Forewing with apex rather sharp, termen not crenulate; SC^1 anastomosing at a point with C, SC^2 from cell, free; light brown, slightly ochreous, irrorated and strigulated with fuscous, parts of the median and distal areas remaining slightly clearer; lines blackish; antemedian slightly thickened, especially behind M and near hindmargin, arising on costa before one-third, curved outward at first, indented between R^3 and M^1 , strongly oblique inward and slightly sinuous to before one-fourth hindmargin; postmedian mostly rather slender, but thickened about R^3-M^1 , arising on costa at five-sevenths, acutely angled outward about R^1 , then oblique and slightly curved inward, reaching hindmargin about three-fifths; a blackish cell-dot; an extremely vague band of dark shading distally to the postmedian, slightly strengthened between the radials and near hindmargin; termen with slightly elongate blackish dots (or short dashes) between the veins.—*Hindwing* with termen not crenulate, but in anterior half appreciably undulate; first line wanting; postmedian not very sharply expressed, placed little beyond the cell-dot, somewhat crenulate, fairly direct or very slightly sinuous, posteriorly slightly oblique outward; some very slight shadings indicating the position of the subterminal line; terminal marks weak.—Underside with the cell-dots strong, somewhat enlarged, especially that of the hindwing, otherwise more weakly marked, the antemedian line of forewing suggested by a darkish

costal spot, the postmedian indicated (rather more sharply on the hindwing) by short dashes or teeth on the veins.

Cape, Montague Baths, November, 1902 (W. F. Purcell), type in coll. S. Afr. Mus. ; paratype in coll. L. B. Prout.

GEN. LARENTIOIDES, gen. nov.

Face not protuberant, with appressed scales. Palpus rather short, moderately stout, closely scaled; 3rd joint quite short. Tongue present. Antenna in ♂ simple. Pectus moderately hairy. Thorax not crested. Abdomen in ♂ moderately slender, not crested, basal cavity without spine; hindtibia (lost), therefore evidently without hair-pencil.

Forewing without fovea; rather narrow, costal margin nearly straight, apex bluntly pointed, termen scarcely waved, gently curved, strongly oblique; cell one-half, DC³ incurved; C free, SC² from cell, anastomosing strongly with SC¹ and afterwards with SC³⁺⁴, forming a double areole, R² from slightly before middle of DC, M¹ separate.—*Hindwing* rather narrow, costa elongate, apex rounded, termen moderately crenulate, tornus nearly square (the extremity rounded off); cell one-half, DC very slightly curved; C closely approximated to SC to beyond middle of cell, then rapidly diverging, SC² separate, R² wanting, M¹ well separate.

Type of the genus: *Larentioides cacothemon*, sp. nov.

Akin to the Oriental genus *Hirasa* Moore, differing in the much narrower, less crenulate wings, the double areole, longer approximation of C of hindwing to SC and secondarily in the non-dilated hindtibia of the ♂.

29. LARENTIOIDES CACOTHEMON, sp. nov.

♂. 33 mm. Face and palpus dark fuscous. Vertex, thorax, and abdomen grey, irrorated with fuscous, which tends to form on each abdominal tergite a pair of very vague spots.

Forewing rather glossy grey, with a slight violaceous tinge and with sparse fuscous and blackish irroration; lines fuscous, not very strong, but blackened with spots or dots on the veins; antemedian from two-fifths costa to one-fourth hindmargin, angulated outward in cell and at submedian fold (shallowly **W**-shaped); median well beyond the slightly elongate black cell-mark, about 1 mm. from the postmedian and approximately parallel therewith, apparently diverging at costa, where, however, it is almost obliterated; postmedian very oblique and sinuous, from beyond five sixths costa, very gently incurved between

radials and more markedly in posterior part, reaching hindmargin little beyond the middle; some weak dark shadings in distal area, in part giving the impression of a less oblique continuation of the postmedian line from M^1 to hindmargin; dark terminal line not very sharp, slightly interrupted at the veins.—*Hindwing* concolorous, at costal margin paler and feebly marked; median and postmedian lines approximated, wavy or somewhat sinuous, the former only, the latter chiefly, pronounced towards abdominal margin, here nearly parallel with termen, anteriorly somewhat receding; cell-mark scarcely indicated; some weak submarginal shades; terminal line as on forewing.—Underside very feebly marked.

Cape, Carnarvon, January, 1910 (J. Drury).

The unique example is unfortunately in poor condition, but easily recognisable by the structural characters combined with the facies, which recalls some narrow-winged Algerian *Hemerophila* or *Boarmia atlanticaria* Stgr., etc.

GEN. PERIDELA Warr.

30. PERIDELA PUNCTILINEA, sp. nov.

♂. 30 mm. Face not tufted, whitish ochreous with dark speckling. Palpus (broken in type) rather short, mostly pale, with some dark speckling on sides and above. Crown somewhat ochreous. Antennal pectinations little longer than diameter of shaft. Thorax and abdomen concolorous with wings. Hindtibia dilated, with hair-pencil, abdominal spine developed.

Forewing with fovea moderate; SC^{1-2} coincident, free (type) or touching C at a point (paratypes); whitish brown, tinged with ochreous on the veins and about the lines; irroration and strong costal dots or strigulae dark fuscous; lines dark fuscous, thickened at costa; antemedian oblique outward from two-sevenths costa, strongly curved in cell, then very oblique inward and slightly sinuous; median slight, except at costa, nearly parallel with termen, very slightly curving away at costa; postmedian about 3 mm. from termen, nearly parallel therewith from hindmargin to R^1 , here bent, running vertically to costa; composed of rather large vein-dots, those on R^2 and SM^1 (fold) generally smaller; cell-spot elongate; some slight dark shading proximal to the almost obsolete subterminal line; terminal dots strong, somewhat elongate.—*Hindwing* with termen somewhat irregularly waved, slightly emarginate between the radials, very slightly prominent at R^3 ; lines not thickened at costa; antemedian wanting;

median slightly incurved between the radials, crossing the strong cell-dot; postmedian from beyond two-thirds costa to abdominal margin near tornus, continuous, though accentuated by large vein-dots, incurved between the radials, strongest about R^3 - M^1 ; distal area nearly as on forewing.—Underside more suffusedly irrorated; first line of forewing wanting, postmedian dots of both wings connected by a line and closely succeeded distally by a moderately broad, distally ill-defined brown band, suffused in places with purplish fuscous; a brown terminal line, somewhat thickened between the veins.

Bechuanaland, Gaberones, 1916 (Marshall), type; two paratypes, from Ovampo Land, in coll. Brit. Mus.

31. PERIDELA BIRECTA, sp. nov.

♂. 28 mm. Palpus one-and-a-half times the length of diameter of eye. Antennal pectinations fully three times as long as diameter of shaft, giving place, after about 36 joints, to mere teeth. Head and palpus very pale ochreous brown, irrorated with ferruginous. Collar somewhat ferruginous. Thorax above vinaceous buff, with a few dark scales. Abdomen paler.

Forewing with the venation apparently somewhat variable, subcostal veins in the type crowded, SC^{1-2} apparently coincident and anastomosing slightly or connected with C (in the three Bloemfontein examples, as is usual in the allied *butaria*, not crowded, SC^1 arising out of C, not touching SC^2); white or whitish, tinged with yellow; an isabelline or slightly fawn-coloured, fuscous-dotted patch from base nearly to first line; lines dark fuscous; first from costa before one-third, slightly excurved at first, then vertical to hindmargin; median line from middle of costa to hindmargin at three-sevenths, obtusely angled between the medians, straight before and behind; space between first and median lines concolorous with basal patch, darkened about DC and behind submedian fold; postmedian line from two-thirds costa, excurved anteriorly and forming a very slight inward curve between R^3 and hindmargin; nearly interrupted between radials, otherwise thick, posteriorly with some dark shading proximally; distal area isabelline or fawn-coloured, separated from postmedian by a white line; subterminal white line distinct, rather thick, very slightly sinuous but not lunulate, posteriorly curving outward nearly to tornus: some fuscous spots proximally to the subterminal; an oblique pale shade from apex across subterminal line; terminal line broken into dots or dashes, not very sharp.—*Hindwing* almost wholly pale, with a minute discal dot and indications (chiefly in abdominal region) of postmedian line and cloudy submarginal and marginal bands (in the Bloemfontein

specimens the submarginal band more complete); terminal line interrupted, not very sharp.—Both wings beneath with similar but weaker markings.

Cape, Namaqualand (Worden), O'okiep, September 22nd, 1886, type in coll. S. Afr. Mus.; Orange Free State, Bloemfontein (H. F. Wilson), 3 in coll. Brit. Mus.

Near *butaria* Swinh. (Tr. Ent. Soc. Lond., 1904, p. 510), but distinct in the shape of the median line and especially very different in the markings of the distal area.

GEN. TEPHRINA Guen.

32. TEPHRINA ABNORMATA, sp. nov.

♂. 29 mm. Face brown. Palpus whitish-brown, 2nd and 3rd joints with darker admixture. Vertex light brown; occiput fawn-colour. Antenna brown; the pectinations rather short (scarcely over twice diameter of shaft) and stout, well ciliated at the tips. Collar somewhat ochreous. Thorax above mostly fawn-colour, beneath light brown. Hindtibia not dilated. Abdomen light brown.

Forewing with fovea; SC¹ arising from C, free; whitish brown, in places (most decidedly in entire distal area) shaded with fawn-colour; irroration wood-brown; costal margin, especially in median area, rather more ochreous brown, with fuscous dots or minute strigulae; lines brown; antemedian rather thick, oblique outward from before one-fourth costa, roundly bent in cell, minutely indented behind M, vertical to about one-third hindmargin; discal dot rather large, black; median line rather thick, not very sharp, bent outward distally to the cell-spot, then almost straight to just beyond middle of hindmargin; postmedian line 3 or 4 mm. from termen, nearly parallel therewith (almost inappreciably incurved about the fold) from hindmargin to R¹, anteriorly somewhat curving proximal; termen with small black dots between the veins.—*Hindwing* with termen a little subcrenulate from SC² to R³, smooth posteriorly; first line wanting; cell-dot smaller, postmedian line less convex than termen, towards abdominal margin slightly curving distad.—Underside much warmer in coloration, the ground-colour being more ochreous, irrorated and shaded (especially on the distal area of hindwing) with a mere ferruginous shade; first line wanting, the others weaker than above, the median, especially on hindwing, ferruginous-ochreous; cell-dots present; terminal dots obsolescent.

Natal, Durban, February, 1914 (W. Haygarth).

Recalls *Discalma normata* Walk. (= *parallelaria* Walk.) in general facies and coloration; apart, however, from the ♂ antenna, it may be distinguished at a glance by the anteriorly curved postmedian line; cell-dots larger and stronger (variable, however, in *normata*).

GEN. DISCALMA Meyr.

33. DISCALMA ARCIFERA DUBIA, subsp. nov.

♂. 30 mm. Differs from *arcifera arcifera* Hmps. (Proc. Zool. Soc. Lond. 1910, p. 469, t. 39, f. 3), from N. E. Rhodesia (and a quite similar ♂ from Ruo Valley, Portuguese East Africa), as follows: Ground-colour less rufescent, with stronger dark irroration; the oblique common line finer and darker, followed distally on each wing above and beneath by a thick, dentate dark line arising near apex and diverging gradually from the oblique line.

North Ovampo Land, 1890-91 (H. W. Eriksson).

As the apex of the forewing is more falcate, this may well prove a distinct species, but the rest of the structure and the facies agree so absolutely that I hesitate so to regard it.

GEN. GONODONTIS Hb.

34. GONODONTIS STICTONEURA, sp. nov.

♂. 37 mm. Head and body concolorous with wings, the face dark-mixed, the palpus infuscated on the outer side. Antennal pectinations long for the genus (over 3 times diameter of shaft).

Forewing with termen not crenulate, scarcely waved; pale greyish ochreous, with scattered (sometimes very weak) dark irroration; lines weak, especially the antemedian, which arises at two-fifths costa and is markedly excurved, but is scarcely traceable except by a slightly pale line which accompanies it proximally and by three black vein-dots, those on M (at origin of M²) and SM² large and conspicuous; postmedian marked with smaller dark vein-dots, arising at four-fifths costa, nearly straight to R³, here angled, its posterior half forming a regular curve, with the convexity directed proximad; a slight pale line accompanying the postmedian distally; cell-mark strong, ocellated, showing a slight tendency to break up into dots; termen with small interneural dots.—*Hindwing* paler, with a similar but rather less intense cell-mark and faintly discernible, angulated postmedian line, beyond which is a vague, narrow whitish band; terminal dots obsolescent.—Both wings beneath with the ocellus strong, the angulated

postmedian line present, dotted on the veins, and a (sometimes almost obsolete) fuscous submarginal band.

Cape, Hout Bay (W. L. Selater), type in coll. S. Afr. Mus.; paratypes from the same locality and Kalk Bay in coll. Brit. Mus. et coll. L. B. Prout.

Possibly a local race of the Abyssinian *integraria* Guén. (Spec. Gén. Léop. ix, 166), which I only know from Guéné's description and Oberthur's figure (a ♀, Et. Lep. ix, fig. 1903), but with the postmedian lines appreciably different from those of both Guéné's species, the large, conspicuous ocellus of the hindwing above distinctive, etc.

GEN. PARECLIPSIS Warr.

35. PARECLIPSIS ONUS, sp. nov.

♂. 34 mm. Face without projecting cone; palpus apparently short (head somewhat crushed); antenna rather strongly lamellate; structure otherwise agreeing with *punctata* Warr. (Nov. Zool. vii, 97). Head and body concolorous with wings.

Forewing with costal margin slightly sinuous, apex round-pointed, termen oblique, curved towards middle, becoming more oblique behind; SC^2 anastomosing at a point with SC^{3+4} ; glossy, broccoli-brown, with minute rather sparse and very inconspicuous blackish-grey irroration; a rather large (nearly 1 mm. diameter), roundish, not very sharply defined grey-black discal spot beyond middle; a very faint line of small grey vein-dots passing midway between this and termen, nearly parallel with the latter but with a very slight curve inward between R^1 and SM^2 .—*Hindwing* paler, in some lights appearing almost whitish; cell-dot smaller than on forewing; postmedian dots almost entirely obsolete, faintly discernible near abdominal margin, more proximally placed than on forewing.—Forewing beneath slightly paler than above, at least posteriorly; cell-spot and postmedian line of dots reproduced, the latter slightly more distinct anteriorly. Hindwing beneath rather less white than above; cell-dot reproduced; postmedian line of dots distinct throughout.

Cape, Cape Town, June, 1872.

GEN. OBOLCOLA Walk.

36. OBOLCOLA CACOTENES, sp. nov.

♂. 28 mm. Structure of *ferrorubrata* Walk. (List Lep. Ins. xxvi, 1670), except as noted; thus differing from typical *Obolcola* in the

elongate wings, long cells and presence of SC^1 of forewing, widely free. Head and body concolorous with wings. Antennal pectinations very much shorter than in *ferrorubrata*, only 2-3 times as long as diameter of shaft; rather slender, well separated.

Forewing not quite so narrow as in *ferrorubrata*, termen towards apex not quite so oblique; light brown, with some slightly rufescent shadings and with scattered dark irroration; costal edge dark-dotted; lines exceedingly faint, placed as in *ferrorubrata*, the median quite fine, the postmedian dots minute; a small black cell-dot; termen with small, weak, dark dots.—*Hindwing* almost uniform grey, with a slight purplish tinge; cell-mark very faintly indicated in rather darker grey.—Underside as in pale examples of *ferrorubrata*, the forewing, except at costal margin, being glossy and feebly marked, the costal margin and the entire hindwing more mixed with ochreous, strongly irrorated; cell-marks present but not strong.

Cape, Wynberg, October, 1862.

Except for size and structure, might have been taken for a striking ab. of *ferrorubrata* of the least rufous form and with the characteristic broad median shade almost obsolete.

GEN. PETELIA H.-Sch.

37. PETELIA PSEUDOGNOPHOS, sp. nov.

♂ ♀. 33 mm. Structure of *strigata* Warr. (Nov. Zool. iv, 103 = *crassata* Warr., op. cit. xi, 477), the face being without projecting tuft and the palpus short for the genus; C of hindwing rather farther from SC, connected by a slight bar near base. Head and body coloured nearly as wings, the face, palpus and fore- and middle-legs slightly darkened, the vertex slightly pale.

Forewing not quite so broad as in *strigata*, termen more oblique; rather glossy grey, somewhat mixed or clouded with light brown and with moderately strong, scattered blackish irroration; lines rather vague, formed of massed brown irroration, from costa at about one-fifth, two-fifths and two-thirds, nearly parallel, all bent strongly outward before middle, inward about middle, outward behind and more or less indented on SM^2 ; cell-dot small, black; subterminal line indicated by a series of fairly large but not very sharply defined whitish vein-spots, proximally edged by some blackish irroration; the spots at R^2 and R^3 weaker, more proximally placed: termen with rather large black interneural dots, slightly extending into grey dashes; fringe almost unicolorous.—*Hindwing* similar, with two instead of three

brown lines, the second scarcely beyond the middle; a small white spot instead of a black dot on the discocellulars.—Both wings beneath glossy pale grey, with black discal dot and very faint suggestions of fairly straight antemedian and postmedian line, a slightly paler band distally to the latter; termen with elongate black interneural marks.

Cape, Cape Town, May, 1913, and December, 1911 (P. C. Keytel), type ♂ and a ♀ in coll. S. Afr. Mus.; Kalk Bay, June, 1904 (Davidson), paratype in coll. L. B. Prout.

Certainly allied to *strigata* Warr., but with very different facies, superficially recalling a *Gnophos*; the markings bear also a striking resemblance to those of the North American *Ixala desperaria* Hulst, and the face and palpus may demand the removal of both *strigata* and *pseudognophos* to Hulst's genus, if that is tenable. The group (the genus *Deilinia* of Meyrick and Hampson) is almost cosmopolitan, though nowhere very rich in species.

INDEX.

A		PAGE	H		PAGE
abnormata (Tephрина)	. . . . .	71	HEBDOMOPHRUDA	. . . . .	60
absurda (Hemerophila)	. . . . .	67	HEMEROPHILA	. . . . .	67
actena (Conchylia)	. . . . .	58	HEMITHEINAE	. . . . .	47
ALLOCHLORODES	. . . . .	47	I		
APHILOPOTA	. . . . .	66	intervenata (Micrologia)	. . . . .	59
arcifera (Discalma)	. . . . .	72	L		
ASPILATOPSIS	. . . . .	63	lamellata (Conchylia)	. . . . .	58
AXIODES	. . . . .	65	LARENTIA	. . . . .	53
B			LARENTIINAE	. . . . .	51
birecta (Peridela)	. . . . .	70	LARENTIOIDES	. . . . .	68
C			leptodoma (Drepanogynis)	. . . . .	62
cacoctenes (Obolcola)	. . . . .	73	licita (Eupithecia)	. . . . .	55
cacothemon (Larentioides)	. . . . .	68	lipara (Ptychopoda)	. . . . .	50
CHLOROCLYSTIS	. . . . .	57	M		
CONCHYLIA	. . . . .	58	mansueta (Palaeaspilates)	. . . . .	50
crenilinea (Hebdomophruda)	. . . . .	60	MICROLOGIA	. . . . .	59
D			muscosa (Chloroclystis)	. . . . .	57
diplocampa (Larentia)	. . . . .	53	O		
DISCALMA	. . . . .	72	OBOLCOLA	. . . . .	73
dochmoleuca (Axiodes)	. . . . .	65	oncogramma (Pseudomaenas)	. . . . .	60
DREPANOGYNIS	. . . . .	62	onus (Pareclipsis)	. . . . .	73
dubia (Discalma)	. . . . .	72	orthobates (Aspilatopsis)	. . . . .	63
E			ORTHOLITHA	. . . . .	51
elpis (Allochlozodes)	. . . . .	47	P		
EUPITHECIA	. . . . .	54	PALAEASPILATES	. . . . .	50
errans (Hebdomophruda)	. . . . .	61	PARECLIPSIS	. . . . .	73
F			PERIDELA	. . . . .	68
flexio (Scopula)	. . . . .	48	peringueyi (Ortholitha)	. . . . .	51
G			pero (Drepanogynis)	. . . . .	62
GEOMETRINAE	. . . . .	59	PETELIA	. . . . .	74
GONODONTIS	. . . . .	72	phanerostigma (Aphilopota)	. . . . .	66
gnamptomia (Chloroclystis)	. . . . .	57	PSEUDOMAENAS	. . . . .	60
			pseudognophos (Petelia)	. . . . .	74
			PTYCHOPODA	. . . . .	50
			pulverea (Sicyodes)	. . . . .	64
			punctilinea (Peridela)	. . . . .	69
			punctiscripta (Ortholitha)	. . . . .	52

New Geometridae (Lepidoptera) in the South African Museum. 77

R	PAGE		PAGE
rediviva (Eupithecia)	54	subconclusaria (Eupithecia)	54
		subochrea (Sicyodes)	64
S		subterlimbata (Eupithecia)	56
SCOPULA	48		
SICYODES	64	T	
STERRHINAE	48	tenuiscripta (Scopula)	48
stictoneura (Gonodontis)	72	TEPHRINA	71
subcanipars (Eupithecia)	55	tumefacta (Chloroclystis)	57